

# Revision Sheets

## **AQA GSCE Trilogy Biology Paper 2 Higher**

Name:

Class:

# 10 Minutes on....

## Homeostasis

Key Term	Definition	Example
Homeostasis		
Receptor		
Stimuli		
Coordination Centres		
Effectors		

**Identify examples of homeostasis.**

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**Explain why homeostasis is important.**

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# 10 Minutes on....

## Nervous System

Key Term	Definition
Nervous System	
Central Nervous System	
Sensory Neurone	
Synapse	
Relay Neurone	
Motor Neurone	

**Draw a diagram in the space below to model the different parts of a reflex arc.**

# 10 Minutes on....

## Reaction Time

### RP

Construct a method to investigate the effect of a factor on reaction time. Use the space below to draw a diagram of how equipment would be set up.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

# 10 Minutes on....

Endocrine  
System

Key Term	Definition
Endocrine System	
Master Gland	
Pituitary Gland	
Pancreas	
Thyroid	
Adrenal Gland	
Ovary	
Testes	

Describe how the endocrine system works.

# 10 Minutes on....

Control of Blood Glucose

Key Term	Definition
Pancreas	
Insulin	
Glycogen	

Describe what happens when blood glucose levels rise.

Describe what happens when blood glucose levels fall.

# 10 Minutes on....

Diabetes

Diabetes	Description	Treatment	Prevention
Type 1			
Type 2			

Identify risk factors of Type 2 diabetes.

Compare Type 1 and Type 2 diabetes.

# 10 Minutes on....

Human  
Reproduction

Key Term	Definition
Menstrual Cycle	
Puberty	

Hormone	Where it is Produced	What it Does
Testosterone		
Oestrogen		
Progesterone		
FSH		
LH		

# 10 Minutes on....

Contraceptives

Contraceptive	Hormonal/ Non- Hormonal	What it Does	+	-
Oral				
Injection				
Barrier Method				
Intrauterine Device				
Spermicidal Agents				
Abstaining				
Surgical Methods				

# 10 Minutes on....

Infertility

Describe the process of IVF.

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Advantages	Disadvantages

# 10 Minutes on....

## Negative Feedback

**Describe the effect adrenaline has on the body.**

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**Describe the effect thyroxine has on the body.**

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**Explain how thyroxine levels are controlled by negative feedback.**

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# 10 Minutes on....

Reproduction

Key Term	Definition
Meiosis	
Mitosis	
Sperm Cell	
Egg Cell	
Pollen	
Sexual Reproduction	
Asexual Reproduction	
Clone	

**Compare sexual and asexual reproduction**

# 10 Minutes on....

## Meiosis

Key Term	Definition
Meiosis	
Gamete	
Fertilisation	

**Describe what happens when cells divide to form gametes.**

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**Explain how fertilisation restores the number of chromosomes.**

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# 10 Minutes on....

DNA and the  
Genome

Key Term	Definition
DNA	
Genome	
Gene	

**Describe the structure of DNA.**

**Describe the advantages of studying the genome.**

# 10 Minutes on....

## Genetic Inheritance

Key Term	Definition
Gamete	
Chromosome	
Gene	
Allele	
Dominant Allele	
Recessive Allele	
Homozygous	
Heterozygous	
Genotype	
Phenotype	

**Identify examples of characteristics controlled by a single gene.**



# 10 Minutes on....

Inherited Disorders

Explain what polydactyly is and how it is inherited.

Explain what cystic fibrosis is and how it is inherited.

Arguments For Embryo Screening	Arguments Against Embryo Screening

# 10 Minutes on....

Explain how sex is determined.

Construct a genetic cross to model sex inheritance.

<div>Father</div> <div>Mother</div>	X	Y
X		
X		

# 10 Minutes on....

Variation

Key Term	Definition
Genome	
Phenotype	
Variation	
Mutation	

Identify causes of variation within a population.

Explain how a change in phenotype may occur.

# 10 Minutes on....

Evolution

Key Term	Definition
Evolution	
Natural Selection	
Species	

Describe the process of evolution.

Explain how to determine if a new species has formed.

# 10 Minutes on....

Selective  
Breeding

**Describe the process of selective breeding.**

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**Identify examples of selective breeding.**

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Benefits of Selective Breeding.	Risks of Selective Breeding

# 10 Minutes on....

Genetic Engineering

Describe the process of genetic engineering.

Identify examples of genetic engineering.

Benefits of Genetic Engineering	Risks of Genetic Engineering

# 10 Minutes on....

# Evidence for Evolution

Key Term	Definition
Evolution	
Fossils	
Antibiotic Resistance	

**Explain why the theory of evolution is now widely accepted.**

# 10 Minutes on....

## Fossils

**Explain how fossils may form.**

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**Describe what we can learn from fossil evidence.**

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**Explain why we can't be sure about how life began on Earth.**

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# 10 Minutes on....

Extinction

Key Term	Definition
Extinction	

Factor Which May Contribute Towards Extinction	Explanation
New Diseases	
New Predators	
New More Successful Competitors	
Climate Change	
Volcanic Eruptions	
Collision With an Asteroid	

# 10 Minutes on....

# Resistant Bacteria

Key Term	Definition
Mutation	
Antibiotic Resistant	
MRSA	

**Describe how antibiotic resistant bacteria strains may emerge.**

# 10 Minutes on....

Classification

Key Term	Definition
Carl Linnaeus	
Linnaean System	
Archaea	
Bacteria	
Eukaryota	

**Describe the Linnaean System.**

**Describe the Three Domain System**

# 10 Minutes on....

Communities

Key Term	Definition
Ecosystem	
Interdependence	
Competition	
Biotic	
Abiotic	
Stable Community	

What Animals Compete For	What Plants Compete For

# 10 Minutes on....

## Abiotic Factors

Abiotic Factor	How a Change Could Affect a Community
Light Intensity	
Temperature	
Moisture Levels	
Soil pH	
Soil Mineral Content	
Wind Direction & Intensity	
Carbon Dioxide Levels for Plants	
Oxygen Levels for Aquatic Animals	

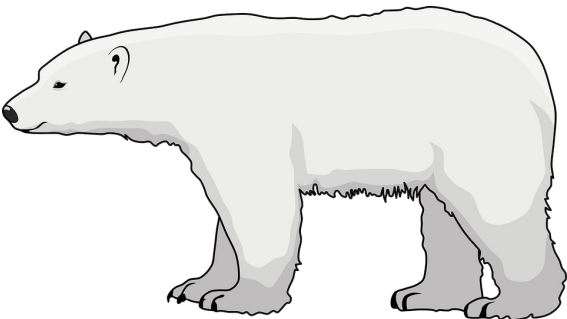
# 10 Minutes on....

Biotic Factors

Biotic Factor	How a Change Could Affect a Community
Availability of Food	
New Predators Arriving	
New Pathogens	
One Species Out Competing Another	

# 10 Minutes on....

Add annotations to the image to identify the adaptations animals living in cold habitats may have.

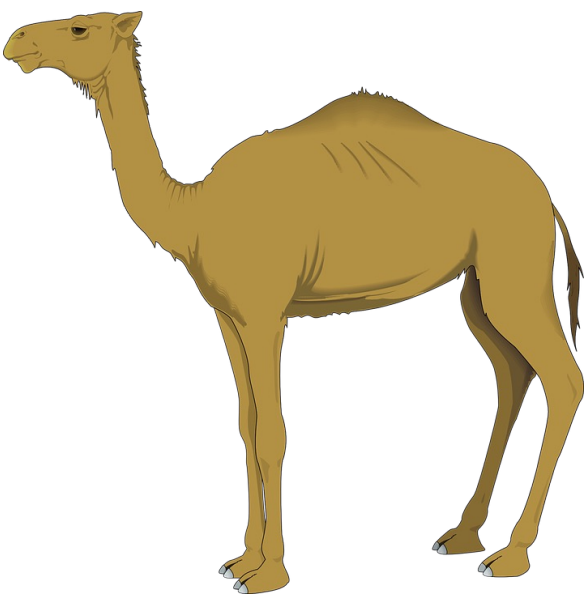


Adaptation for the Cold	How It Helps The Animal Survive

# 10 Minutes on....

Animal Adaptations  
Hot Dry Climates

Add annotations to the image to identify the adaptations animals living in hot and dry habitats may have.



Adaptation for Survival in the Desert	How It Helps The Animal Survive

# 10 Minutes on....

Add annotations to the image to identify the adaptations plants have for living in hot and dry habitats.



Adaptation for Survival in the Desert	How It Helps The Plant Survive

# 10 Minutes on....

## Extremophiles

Key Term	Definition
Extremophile	
Deep Sea Vents	

**Identify examples of extreme environments.**

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**Describe what conditions around a deep-sea vent would be like.**

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**Describe and explain what would happen to a normal cell if it were in very salty conditions.**

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# 10 Minutes on....

## Levels of Organisation

Key Term	Definition
Biomass	
Photosynthetic Organisms	
Food Chain	
Producer	
Consumer	
Predator	
Prey	
Stable Community	

**Construct a labelled food chain to model a feeding relationship you may find in a garden.**

# 10 Minutes on....

# Quadrat RP

**Construct a method to approximate the number of dandelion that are in a field. Use the space below to draw a diagram of how equipment would be set up.**

# 10 Minutes on....

# Transect RP

**Construct a method to investigate the effect of light on the distribution of dandelion in a field. Use the space below to draw a diagram of how equipment would be set up.**

# 10 Minutes on....

## Carbon Cycle

Key Term	Definition
Combustion	
Respiration	
Decay	
Photosynthesis	

**Construct a diagram to model the carbon cycle.**

**Describe the role of microorganisms in the carbon cycle.**

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# 10 Minutes on....

Water Cycle

Key Term	Definition
Evaporation	
Condensation	
Precipitation	
Transpiration	

**Construct a diagram to model the water cycle.**

# 10 Minutes on....

## Biodiversity

Key Term	Definition
Biodiversity	

Change on Earth	Effect on Biodiversity Explained
Deforestation	
Waste	
Global Warming	

**Explain why biodiversity is important.**

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# 10 Minutes on....

Waste  
Management

Key Term	Definition
Waste	

Pollution	Examples
Water	
Air	
Land	

Explain why the amount of waste on Earth is increasing.

# 10 Minutes on....

Land Use

Identify ways humans reduce land available for animals and plants.

Explain why the destruction of peat bogs is reducing biodiversity.

Arguments for the Destruction of Peat Bogs	Arguments Against The Destruction of Peat Bogs

# 10 Minutes on....

Deforestation

Explain why deforestation is occurring.

Advantages of Deforestation	Disadvantages of Deforestation

# 10 Minutes on....

Global Warming

Key Term	Definition
Global Warming	
Climate Change	

Biological Consequence of Global Warming	Effect on Biodiversity Explained
Glaciers and Polar Ice Melting	
Expansion of Seawater	
Extreme Weather	
Changes in Animal Migration Patterns	
Changes in Rainfall	
Loss and Extinction of Animals and Plants	
Habitats Changing	

# 10 Minutes on....

Maintaining Biodiversity

Way to Maintain Biodiversity	Description	+	-
Breeding Programmes			
Protection and Regeneration of Rare Habitats			
Reintroduction of Field Margins			
Reduction of Deforestation			
Reduction in Carbon Dioxide Emissions			
Recycling Resources			